Please cancel Claim 5, without prejudice or disclaimer of subject matter.

Please amend Claims 1-4, 6-8, and 11-15 and add Claim 16, as indicated below.

The following is a complete listing of claims and replaces all prior versions and listings of claims

in the present application:

1. (currently amended) A wireless communication system having first and second wireless

communication devices, wherein

said first wireless communication device comprises:

a detection ~~means for detecting~~ unit adapted to detect a plurality of beacons at a

plurality of frequencies ~~each frequency~~;

~~search means for searching for a wireless communication device which has a~~

~~predetermined function, and is present on a network identified by network identification~~

~~information contained in the beacon detected by said detection means, in accordance with the~~

~~network identification information; and~~

a first transmission unit adapted to transmit a search request signal to a wireless

device that is present on a network identified by network identification information included in a

beacon detected by said detection unit so as to search for a wireless communication device

having a predetermined data processing function;

a determination unit adapted to determine a wireless communication device

having the predetermined data processing function on the basis of a response signal that the

determined wireless communication device has transmitted in response to the search request

signal transmitted by said first transmission unit;

a display unit adapted to ~~means for~~ selectably display ~~displaying~~ information

associated with the wireless communication device determined ~~detected~~ by said determination

unit ~~search means~~ so as to determine a wireless communication partner; and

a control unit adapted to, when a user selects the information displayed by said display unit while said detection unit detects the beacon, terminate the detection process of said detection unit and execute connection processing with a wireless communication device specified by the selected information, and

said second wireless communication device comprises:

a second transmission unit adapted to transmit a signal including self identification information as the response signal ~~means for~~, when search request information is detected in a wireless reception waiting state at a predetermined frequency~~, transmitting information including self identification information as response information, and~~

~~when information of said second wireless communication device displayed by said display means is selected, a process for establishing a communication between said first and second wireless communication devices is executed~~.

2. (currently amended) A wireless communication device comprising:

a detection unit adapted to detect ~~means for detecting~~ a plurality of beacons at a plurality of frequencies ~~each frequency~~;

a transmission unit adapted to transmit a search request signal to wireless communication units that are present on a network identified by network identification information included in a beacon detected by said detection unit, so as to search for a wireless communication unit having a predetermined data processing function;

a determination unit adapted to determine a wireless communication unit having the predetermined data processing function based on a response signal that the determined wireless communication unit has transmitted in response to the search request signal transmitted by said transmission unit;

~~search means for searching for a wireless communication device which has a~~
~~predetermined function, and is present on a network identified by network identification~~
~~information contained in the beacon detected by said detection means, in accordance with the~~
~~network identification information; and~~

<u>a</u> display <u>unit adapted to</u> ~~means for~~ selectably <u>display</u> ~~displaying~~ information associated with the wireless communication ~~device~~ <u>unit determined</u> ~~detected~~ by said <u>determination unit</u> ~~search means~~ so as to ~~determine~~ <u>enable identification of</u> a wireless communication partner<u>; and</u>

<u>a control unit adapted to, when a user selects the information displayed by said</u> <u>display unit while said detection unit is performing a detection process to detect the beacon,</u> <u>terminate the detection process of said detection unit and execute connection processing with a</u> <u>wireless communication device specified by the selected information</u>.

3. (currently amended) The device according to claim 2, wherein said ~~search means~~ <u>transmission unit connects the network identified by the network identification information</u> <u>included in the beacon detected by said detection unit and</u> transmits <u>the</u> search request information ~~in accordance with the network identification information included in the beacon~~ ~~detected by said detection means so as to search for the wireless communication device having~~ ~~the predetermined function~~ <u>to the network,</u> and <u>said determination unit</u> stores in a memory identification information of a wireless communication ~~device~~ <u>unit</u> on a partner side included in a response to the search request information upon reception of the response, and

said display <u>unit</u> ~~means~~ selectably displays the identification information stored in the memory.

4. (currently amended) The device according to claim 2, wherein each of the wireless communication device and the ~~partner~~ wireless communication ~~device~~ partner comprises one of an image sensing device, a device for executing a print process of a sensed image, and a storage device for executing a storage process of a sensed image.

5. (cancelled).

6. (currently amended) The device according to claim 2, wherein, when no signal is received in response to the search request signal ~~partner wireless communication device is found~~ within a predetermined period of time, an error display is made.

7. (currently amended) The device according to claim 2, further comprising:

determination means for determining if the beacon detected by said detection means is a beacon in an adhoc communication mode or a beacon in an infrastructure communication mode, and,

~~in that~~ when said determination means determines that the detected beacon is the beacon in the adhoc communication mode, said search means transmits search request information toward a wireless communication processing device as a generation source of ~~that~~ the detected beacon, and,

when said determination means determines that the detected beacon is the beacon in the infrastructure mode, said search means transmits search request information of a wireless communication processing device toward an access point.

8. (currently amended) The device according to claim 2, further comprising registration means for registering, in a memory, information associated with a connection to the partner wireless communication device, to which ~~the~~ a wireless communication has been established.

9. (original) The device according to claim 8, further comprising a mode for executing a process for establishing a wireless communication on the basis of the information registered by said registration means.

10. (currently amended) A wireless communication device comprising:

a storage unit adapted to store ~~means for storing~~ device identification information and network identification information of a partner to which the ~~self~~ wireless communication device has been connected previously;

an instruction ~~means for instructing~~ unit adapted to instruct one of a history search mode that communicates with a desired partner wireless communication device based on the information stored in said storage unit ~~means~~, and a new search mode that searches for a new partner wireless communication device via a wireless communication, and communicates with the ~~found~~ new partner wireless communication device;

a beacon detection unit adapted to ~~means for~~, when said instruction unit ~~means~~ instructs the new search mode, detect ~~detecting~~ a beacon;

a search unit adapted to compare ~~means for comparing~~ network identification information included in the detected beacon with the network identification information stored in said storage unit ~~means~~, ~~making~~ make said detection unit ~~means~~ detect another beacon, if ~~the two pieces of~~ there is a match in the compared network identification information ~~match~~, and ~~searching~~ search for a partner wireless communication device to communicate with based on

new network identification information, if the new network identification information is detected;

a first display unit adapted to ~~means for~~ selectably ~~displaying one~~ display device identification information of a wireless communication unit found by said search unit ~~means~~;

a second display unit adapted to ~~means for~~, when said instruction unit ~~means~~ instructs the history search mode, selectably ~~displaying~~ display the device identification information of a wireless communication unit stored in said storage unit ~~means~~; and

a wireless communication establishment process unit adapted to ~~means for~~, when ~~one~~ device identification information displayed by one of said first and second display unit ~~means~~ is selected, execute ~~executing~~ a wireless communication establishment process with wireless communication unit specified by ~~on the basis of~~ the selected device identification information.

11. (currently amended) A wireless communication system having first and second wireless communication devices, wherein

said first wireless communication device comprises:

~~determination means for determining~~ a discrimination unit adapted to discriminate a ~~designated process~~ type of device capable of executing a processing designated by an operator; ~~and~~

a determination unit adapted to, when receiving a beacon transmitted by a device on a wireless network, determine whether device identification information corresponding to the type discriminated by said discrimination unit is included in the received beacon; and

a display ~~means for~~ unit adapted to, if said determination unit determines that the device identification information corresponding to the type discriminated by said discrimination

unit is included in the received beacon, selectably display ~~displaying~~ information associated with a ~~the~~ device that transmitted the beacon ~~having a function of the process type determined by said determination means on the basis of signals informed by another devices~~, and

said second wireless communication device comprises:

an informing unit adapted to include ~~means for informing of~~ device identification information indicating a ~~self~~ function into a beacon and transmitting the beacon to the wireless network, and

when information of said second wireless communication device among information displayed by said display unit ~~means~~ is selected, a process for establishing a communication between said first and second wireless communication devices is executed.

12. (currently amended) A wireless communication device comprising:

~~determination means for determining~~ a discrimination unit adapted to discriminate a ~~designated process~~ type of device capable of executing a processing designated by an operator; ~~and~~

a determination unit adapted to, when receiving a beacon transmitted by a device on a wireless network, determine whether device identification information corresponding to the type discriminated by said discrimination unit is included in the received beacon; and

a display ~~means for displaying~~ unit adapted to, if said determination unit determines that the device identification information corresponding to the type discriminated by said discrimination unit is included in the received beacon, selectably display information

- 8 -

associated with ~~a~~ the device that transmitted the beacon ~~having a function of the process type~~ ~~determined by said determination means on the basis of signals informed by another devices~~.

13. (currently amended) A method ~~of controlling~~ performed by a wireless communication device, the method comprising:

a detection step of detecting a plurality of beacons at a plurality of frequencies;

a transmission step of transmitting a search request signal to wireless communication units that are present on a network identified by network identification information included in a beacon detected in said detection step, so as to search for a wireless communication unit having a predetermined data processing function;

a determination step of determining a wireless communication unit having the predetermined data processing function based on a response signal that the determined wireless communication unit has transmitted in response to the search request signal transmitted in said transmission step;

~~a search step of searching for a wireless communication device which has a~~ ~~predetermined function, and is present on a network identified by network identification~~ ~~information contained in the beacon detected in the detection step, in accordance with the~~ ~~network identification information; and~~

a display step of selectably displaying information associated with the wireless communication ~~device detected~~ unit determined in the determination ~~search~~ step so as to ~~determine~~ enable identification of a wireless communication partner; and

a control step of, when a user selects the information displayed in said display

step while a detection process is being performed in said detection step to detect the beacon,

terminating the detection process in said detection step and executing connection processing with

a wireless communication device specified by the selected information.

14. (currently amended) A method ~~of controlling~~ performed by a wireless communication

device having a memory for storing device information and network identification information of

a partner wireless communication device that has been connected previously, the method

comprising:

a storage step of storing, in a memory, device identification information and

~~network identification information of a partner wireless communication device which has been~~

~~connected previously;~~

a determination step of determining an operator's instruction that instructs one of

a history search mode that communicates with a desired partner wireless communication device

based on the information stored in the memory, and a new search mode that searches for a new

partner wireless communication device via a wireless communication, and communicates with

the ~~found~~ new partner wireless communication device;

a search step of executing, when the operator instructs the new search mode, a

beacon detection process, comparing network identification information included in the detected

beacon with the network identification information stored in the memory, continuing a detection

process of another beacon, if ~~the two pieces of~~ there is a match in the compared network

identification information ~~match~~, and searching for a partner wireless communication device to

- 10 -

communicate with based on new network identification information, if the new network

identification information is detected;

a first display step of selectably displaying ~~one~~ device identification information

of a wireless communication unit found in the search step on a display unit;

a second display step of selectably displaying, when the operator instructs the

history search mode, the device identification information of a wireless communication unit

stored in the memory on the display unit; and

a wireless communication establishment process step of executing, when ~~one~~

device identification information displayed in one of the first and second display steps is

selected, a wireless communication establishment process with the wireless communication unit

specified by ~~on the basis of~~ the selected device identification information.

15. (currently amended) A method ~~of controlling~~ performed by a wireless communication

device, the method comprising:

a ~~determination~~ discrimination step of discriminating ~~determining~~ a ~~designated~~

~~process~~ type of device capable of executing a processing designated by an operator; ~~and~~

a determination step of, when receiving a beacon transmitted by a device on a

network, determining whether device identification information corresponding to the type

discriminated in said discrimination step is included in the received beacon; and

a display step of, if it is determined in said determination step that the device

identification information corresponding to the type discriminated in said discrimination step is

included in the received beacon, selectably displaying information associated with ~~a~~ the device

- 11 -

that transmitted the beacon ~~having a function of the process type determined in the determination step on the basis of signals informed by another devices on a display unit~~.

16. (new) The device according to claim 2, wherein said predetermined data processing function includes at least one of a data printing function and a data saving function.